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2e

CZECHOSLOVAKIA

DOLIHAL, J; TOVAREK, J; POKORNY, J.

Third Internal Medicine Clinic of the Medical Faculty of J. E. Purkyne University (III. vnitrni klinika lekarske fakulty University J. E. Pukyne), Brno (for all)

Prague, Vnitrni lekarstvi, No 10, 1963, pp 1010-1013

"The Clinical Picture of Acute Intermittent Porphyria."

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POJER, J.,prof. MUDr.; MASTIK, C.; NINGER, E.; DOLIHAL, J. Technicka spoluprace: TOVAREK, J.; POKORNY,J.

Hepatic changes in heart infarction. Bratisl. lek. listy 45 no.8:460-468 30 Ap '65.

1. III. vnitrni klinika Lekarske fakulty University J.E. Purkyne v Brne (vedouci : prof. MUDr. J. Pojer).

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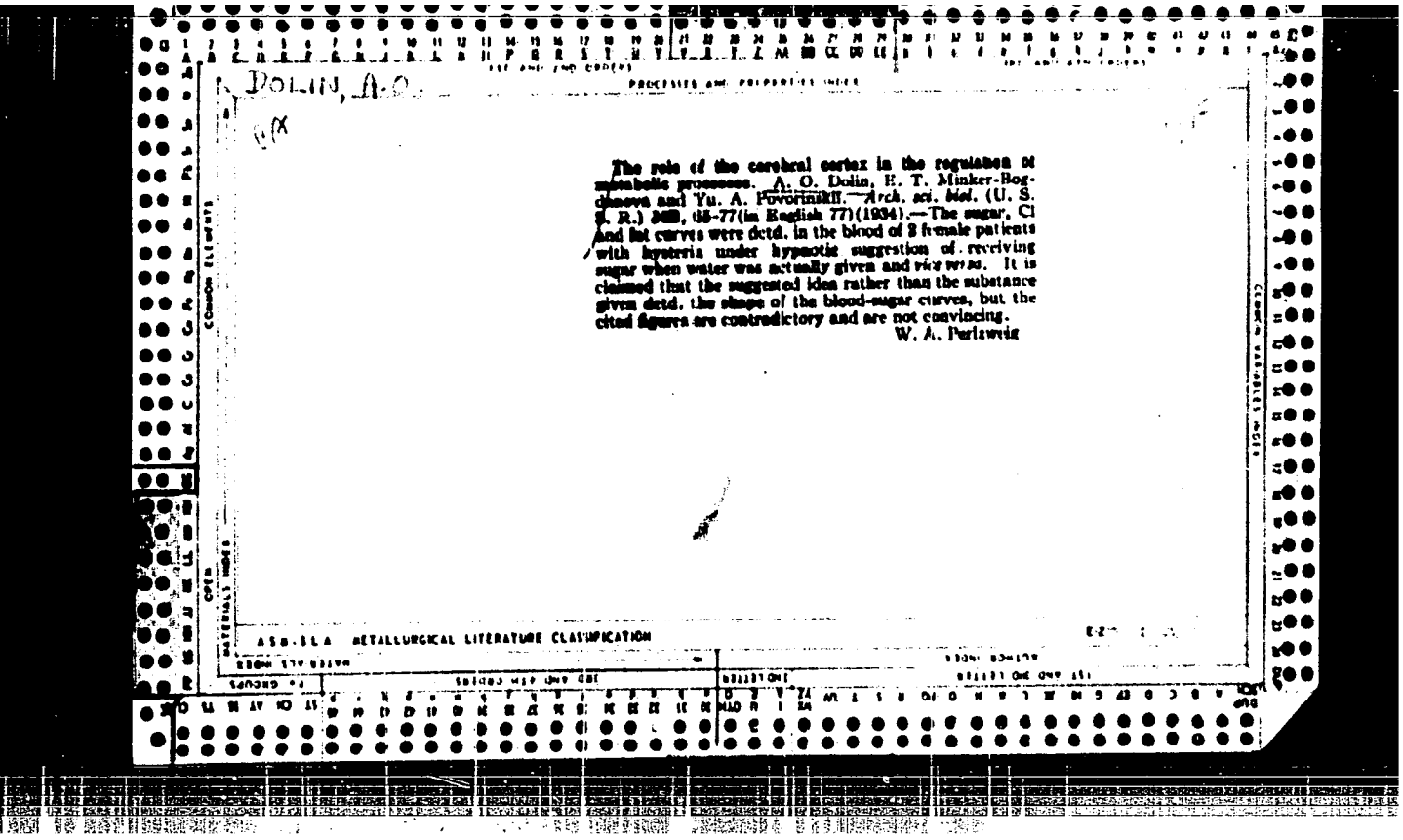

DOLIN, A. O.

The role of the cerebral cortex in the regulation of metabolic processes. A. O. Dolin, E. T. Minker-Bogdanova and Yu. A. Povorinskii. *Arch. sci. biol.* (U. S. S. R.) 36, 65-77 (in English 77) (1934).—The sugar, Cl And fat curves were detd. in the blood of 2 female patients with hysteria under hypnotic suggestion of receiving sugar when water was actually given and *vice versa*. It is claimed that the suggested idea rather than the substance given detd. the shape of the blood-sugar curves, but the cited figures are contradictory and are not convincing.

W. A. Perlzweig

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DOLIN A.O.

DOLIN A. O.

Generalizatsiia uslovnykh reflekxov v period ikh spetsializatsii kak forma proiavleniia sistemnosti korikovykh protsessov. /Close correlation of elements of a complex system and correlation of the entire complex with surrounding conditions/ Tr. Fiziol. laborat. Pavlova 16: 1949 p. 360-81.

1. Of the Physiological Division of the All-Union Institute of Experimental Medicine (Head — Academician I. P. Pavlov).
CLML Vol. 19, No. 1 July 1950

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DOLIN, A.O.

[Summation of internal inhibition and its role in the modification of unconditioned alimentary, and defense reflexes] Summatsiia vnutrennego tormozheniia i ee rol' v izmenenii bezuslovnykh pishchevykh i oboronitel'nykh refleksakh. Tr.Fiziol.laborat.Pavlova 16:382-397 '49. (CLML 19:1)

1. Of the Physiological Department imeni Academician I.P.Pavlov of the All-Union Institute of Experimental Medicine and the Department of the Physiology and Pathology of Higher Nervous Activity imeni Academician I.P.Pavlov of the State Institute for the Advanced Training of Physicians.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410820010-5"

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Conditioned reflex cataleptic condition. Zh. vyssheĭ nerv. deiat. Pavlova 1 no.4:485-499 July-Aug 1951. (CLML 23:2)

1. Laboratory of Experimental Neuropathology of the Physiology Department imeni Academician I. P. Pavlov of the All-Union Institute of Experimental Medicine and Department of the Physiology and Pathology of Higher Nervous Activity imeni Academician I. P. Pavlov, State Institute for the Advanced Training of Physicians.

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DOLIN, A.O.

Pathological and protective role of conditioned and unconditioned reactions. Zh. vyssheĭ nerv. deiat. 1 no. 6:934-943 Nov-Dec. 1951. (CLML 23:3)

1. Moscow.

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DOLIN, A. O. -- "Conditioned-Reflex Emergence and Suppression of Pathological Conditions in an Organism." Sub 22 Apr 52, Central Inst for the Advanced Training of Physicians. (Dissertation for the Degree of Doctorate in Medical Sciences) .

SO: Vechernaya Moskva January-December 1952

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DOLIN, A.O.; ZBOROVSKAYA, I. I.

Further study on the process of inhibition (induction inhibition) in repression of pathologic conditions. Zh. vyssheĭ nerv. deiat. 2 no. 1:70-77 Jan-Feb 1952. (CIML 23:3)

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410820010-5

USSR/Medicine - Immunology Jul/Aug 52

"Role of the Cortex in Immune Reactions of the Organism," A. O. Dolin, V. N. Krylov, Mil Med Acad imeni S. M. Kirov and Chair of Physiol and Pathol of Higher Nervous Activity, Cen Inst for Advanced Tng of Physicians

"Zhur Vyssh Nerv Deyat" Vol 2, No 4, pp 547-560

Results of expts, particularly when dynamic stereotypes are established, offer sufficient ground to think that in immune reactions, as in defensive reactions of an organism, cortical dependence is extremely

234T44

DOLIN, A. O.

Intensive and firm. Expt1 data obtained by inducing immunological and toxic reactions with the aid of conditional irritants furnishes the basis for confirmation that the cortical component is necessarily = part of the over-all phenomena which form the immunological reaction, strengthening or weakening it depending on intercentral relationships that are formed. All this attests to the significance and performed. All this attests to the significance and peractivity of cells which were directed toward the study of the defensive, protective role of the nervous system and the particularly great part that the cortex plays in that activity.

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1. Professor. 2. Moscow.

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LEPESHINSKAYA, O.B., professor; USIYEVICH, M.A., professor; ASRATYAN, E.A., professor; SMIRNOV, A.I., professor; FILIPPOVICH, S.I., doktor meditsinskikh nauk; VOLOKHOV, A.A., professor; FILIMONOV, I.N., professor; SNYAKIN, P.G., professor; CHERNIGOVSKIY, V.N., professor; SPERANSKIY, A.D., akademik; DOLIN, A.O., doktor meditsinskikh nauk; KOTLYAREVSKIY, L.I., professor; NEGOVSKIY, V.A., professor; KASATKIN, N.I., professor; STEL'CHUK, I.V., professor; YEGOROV, B.G., professor; BAKULEV, A.N., professor; SMIRNOV, L.I., professor; USPENSKIY, V.N., redaktor; PETROV, S.P., redaktor.

[Teachings of I.P.Pavlov in theoretical and practical medicine] Uchenie I.P.Pavlova v teoreticheskoi i prakticheskoi meditsine. Vol.2. Moskva, Izd-vo Ministerstvo zdravookhraneniia SSSR, 1953. 611 p. (MLRA 7:3)

1. Deystvitel'nyy chlen AMN SSSR (for Lepeshinskaya, Chernigovskiy and Bakulev). 2. Chlen-korrespondent Akademii nauk SSSR (for Asratyan). 3. Chlen-korrespondent AMN SSSR (for Smirnov, Filimonov, Yegorov and L.I.Smirnov). 4. Moscow. TSentral'nyy institut usovershenstvovaniya vrachey. (Pavlov, Ivan Petrovich, 1849-1936) (Nervous system) (Physiology)

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DOLIN, A.O.

Chem Abs V48
1-25-54
Pathology

(6)

Characterization test of epileptiform state phases by means of the transhemation reaction. L. A. Blyumenfel'd, A. O. Dolin, S. E. Krasovitskaya, T. P. Rolich, and A. M. Charnyi (Ministry Health, Moscow). *Doklady Akad. Nauk S.S.S.R.* 92, 189-91(1953).—The rate of the transhemation reaction reflects the phases of the epileptic state. Preconvulsion state reduces the rate of transhemation, a change that becomes evident immediately upon introduction of camphor. The retardation is then replaced with a constantly increasing rate of transhemation. If the convulsions are feeble, the latter phase is not apparent. The postconvulsive state is characterized by gradual retardation of transhemation. The expts. were run on rabbits, and the transhemation reaction was run as described earlier (*C.A.* 46, 7637f). G. M. Kosolapoff

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Physiological principles of psychoprophylactic preparation for labor. Akush. i gin. 32 no.3:47-62 My-Je '56. (MLRA 9:9)

1. Iz Instituta kusherstva i ginekologii (dir. L.G.Stepanov) Ministerstva zdravookhraneniya SSSR
(LABOR,
painless, psychoprophylactic method, physiol. aspects (Russ)

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DOLIN, A.O., (Moskva)

Experimental pathology of the higher nervous activity. Zhur.vys. nerv.deiat. 7 no.6:819-830 N-D '57. (MIRA 11:2)
(CENTRAL NERVOUS SYSTEM, physiology,
higher nervous activity, exper. disord., review (Rus))

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ANOKHIN, P.K., BABSKIY, Ye.B., VERESHCHAGIN, N.K., KABANOV, A.N., PUCHKOV, N.V. DOLIN, A.O.

Nikolai Vladimirovich Timofeev; an obituary. Fiziol.zhur. 44 no.9:904-905 S '58 (MIRA 11:12)
(TIMOFEEV, NIKOLAI VLADIMIROVICH, 1896-1958)

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Nature of the double role of inhibition as compared with reactions of the organism to chemical epileptogenic stimuli. Zhur.vys.nerv.deiat. 9 no.3:343-353 My-Je '59. (MIRA 12:9)
(REFLEX, CONDITIONED)
(CONVULSIONS, experimental)

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Recent experimental data on conditioned reflex production and the inhibition of immune and allergic reactions. Zhur.vys.nerv.deiat. 10 no.6:832-841 N-D '60. (MIRA 14:1)

1. Kafedra fiziologii vysshey nervnoy deyatel'nosti Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(CONDITIONED RESPONSE) (ALLERGY) (IMMUNITY)

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410820010-5"

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DOLIN, Aleksandr Osipovich, prof.; KOZAROVITSKIY, L.B., red.; KAPYSHEVA, V.S., red. izd-va; GRIGORCHUK, L.A., tekhn. red.

[Pathology of the higher nervous activity] Patologiia vysshei nervnoi deiatel'nosti. Moskva, Gos.izd-vo "Vysshaia shkola," 1962. 338 p. (MIRA 16:8)
(BRAIN—DISEASES)

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DOLIN, A.O. (Moskva); FARBER, D.A. (Moskva); ZHANOVSKIY, Yu.F. (Moskva)

Determination of the lability of nervous processes based on the reaction of assimilating the rhythm of light flickering. Zhur. vys. nerv. deiat. 15 no.2:381-392 Mr-Ap '65.

(MIRA 18:5)

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DOLIN, B.

Hunting with a movie camera. Moskva, Goskinoizdat, 1951.

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SHAROV, I., inzh.; DOLIN, I., inzh.

Using plastic materials in building apartment houses. Zhil.-kom.khoz. 9 no.6:17-18 '59. (MIRA 12:10)
(Moscow--Apartment houses) (Plastic materials)

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DOLIN, I. I. and BRUSENTSEVA, S. A. (Inst of Physical Chemistry)

"The Action of Ionizing Radiation on Concentrated Water Solutions of Inorganic Substances"

Isotopes and Radiation in Chemistry, Collection of Papers of 2nd All-Union Sci.Tech. Conf. on Use of Radioactive and Stable Isotopes and Radiation in National Economy and Science, Moscow, Izd-vo AN SSSR, 1958, 360pp.

This volume publishes the reports of the Chemistry Section of the 2nd All Sci Tech Conf on Use of Radioactive and Stable Isotopes and Radiation in Science and the National Economy, sponsored by Acad. Sci. USSR and Main Admin for Utilization of Atomic Energy under Council of Ministers USSR, Moscow, 4-12 April 1957.

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DOLIN, K.

Study, constructive work, relaxation. Prof.-tekh.obr. 15 no. 7:14 Jl '58. (MIRA 11:7)
(Railroads--Employees--Education and training)

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9,3700

S/141/61/004/005/015/021
E039/E120

AUTHOR: Dolin, L.S.

TITLE: On the possibility of comparison of three-dimensional electromagnetic systems with non-uniform anisotropic filling

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, v.4, no.5, 1961, 964-967

TEXT: Electromagnetic field systems can be investigated, without a direct solution of Maxwell's equations, by comparison with other simpler field systems. In this paper the possibility of comparing analogous three-dimensional systems is examined. Starting from Maxwell's equations in generalised orthogonal coordinates, invariant equations are derived relating electric and magnetic current densities, charge density, permittivity and permeability. These equations can be applied to a three-dimensional field system with anisotropic filling. A simple example is used to illustrate the method; this is a naturally oscillating resonator with perfectly conducting walls. It is shown that, by substitution, it is possible to examine the

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On the possibility of comparison of .. S/141/61/004/005/015/021
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electromagnetic field components in a second resonator with different parameters for the filling medium. It should be noted that as it is not permissible to transform the properties of a medium independently, because there are well defined relations between them, this puts some limitation on the method. However, it is shown that the method is useful for the solution of electromagnetic field problems.
There are 2 figures and 3 Soviet-bloc references.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete
(Scientific Research Institute for Radiophysics at Gor'kiy University)

SUBMITTED: March 11, 1961

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410820010-5

DOLIN, L.S.

Scattering of a light beam in a layer of a turbid medium.
Izv. vys. uchob. zav. radiofiz. 7 no.2:380-382 '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete.

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410820010-5

DOLIN, L.S.

Description of the radiation from weakly inhomogeneous wave fields. Izv. vys. ucheb. zav.; radiofiz. 7 no.3:559-562 '64. (MIRA 17:11)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete.

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EEC(b)-2/EWP(k)/EWA(m)-2 Po-4/Pz-6/Pab-24/Pf-4/Pi-4/Pl-4 IJP(c)/ASD(a)-5/
ESD(gs)/ESD(t)/RAEM(t) WW/JEB/AT

ACCESSION NR: AP4041101 S/0141/64/007/003/0471/0478

112
110

AUTHOR: Dolin, L. S.

TITLE: Reciprocity relations for partially coherent electromagnetic fields

SOURCE: IVUZ. Radiofizika, v. 7, no. 3, 1964, 471-478

TOPIC TAGS: correlation analysis, reciprocity relation, Maxwell equation, electromagnetic diffraction, radiation resistance

ABSTRACT: Reciprocity relations are obtained for the tensor correlation functions for a random stationary electromagnetic field, first introduced by E. Wolf (Nuovo Cimento v. 12, 884, 1954). Since these correlation functions have been shown to satisfy a system of linear differential equations equivalent to the Maxwell equations, the author considers it of interest to generalize the reciprocity principle, formulated originally for the case of regular fields, and

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to change over to a correlation formulation of the reciprocity principle. It is shown that the electrodynamic reciprocity principle can be formulated in the form of relations not between the fields and the currents but between the correlation functions directly. He then proceeds to apply the results to the diffraction of random fields, using a modification of the method of auxiliary sources, which is widely used in the theory of radiation and diffraction of regular fields. As a particular example, the author considers the diffraction of a statistically homogeneous and isotropic field by an arbitrary object, where the problem of determining the correlation characteristics reduces to the determination of the mutual radiation resistance of the body and a set of elementary dipoles. The case when the diffracted field can be regarded as homogeneous over the length of the diffracting object is also treated from the reciprocity point of view. "In conclusion, I thank M. A. Miller for valuable advice and remarks." Orig. art. has: 24 formulas.

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ACCESSION NR: AP4044101

ASSOCIATION: Nauchno issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Scientific Research Radiophysics Institute at the Gor'kiy University)

SUBMITTED: 19Jul63 ENCL: 00

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L 15993-66 EEC(k)-2/EWT(d)/EWT(1)/FCC GW/WH-2/LHB
ACC NR: AP6007631 SOURCE CODE: UR/0141/66/009/001/0061/0071

AUTHOR: Dolin, L. S.

ORG: Scientific Research Radiophysics Institute of Gor'kiy University (Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete) 46 B

TITLE: Propagation of a narrow light beam in a medium with pronounced anisotropic scattering 21,44,55 6

SOURCE: IVUZ. Radiofizika, v. 9, no. 1, 1966, 61-71

TOPIC TAGS: light propagation, searchlight sounding, light scattering, atmospheric optics

ABSTRACT: The problem of the propagation of an initially narrow, sharply directed light beam in a turbid medium with pronounced anisotropic scattering is examined. Proceeding from the transport equation in the approximation of small angles, the dependence of the beam-axis illumination intensity, the dispersion of the angle of beam arrival, and the effective beam cross section on the optical path, initial beam characteristics, and angular width of the indicatrix of scattering is computed. The computations yield a reasonably complete qualitative picture of the structure of the beam in the area relatively near the source. The

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basic characteristics of the beam with zero initial dispersion is shown diagrammatically (see Fig. 1). The upper curve depicts the axial distribution of the

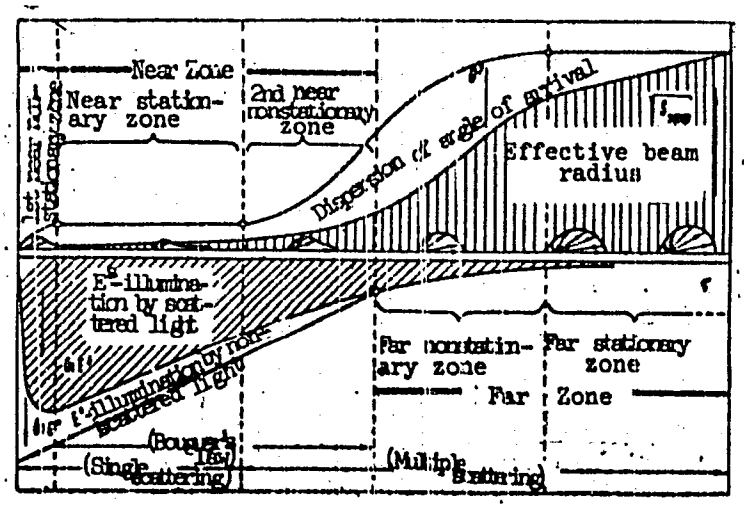

Fig. 1. Beam dispersion characteristics

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angular dispersion of beam arrival (δ^2). The upper lined area corresponds to the configuration of the beam, whose limits are set by a definite level of intensity fall-off. The deformation of the brightness body on the beam axis is illustrated by several qualitative diagrams. The lower half of the diagram shows the axial distribution of illuminations E^0 and E^s by nonscattered and scattered light respectively. The beam is broken down into the zones indicated on the basis of the illumination intensities created on the beam axis by the nonscattered and scattered fields. The scale of the diagram is arbitrarily chosen. Orig. art. has: 21 formulas and 6 figures.

SUB CODE: 04/ SUBM DATE: 03May65/ ORIG REF: 009/ OTH REF: 002/ ATD PRESS: 4203 [DM]

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410820010-5

AUTHORS: Dolin, N.F., and Zyabkina, Z.F. (Engineers) SOV/110-59-9-22/22

TITLE: A Scientific-technical Conference on Rectifiers

PERIODICAL: Vestnik elektropromyshlennosti,1959,Nr 9, p 80 (USSR)

ABSTRACT: A scientific-technical conference on rectifiers was held in Zaporozh'ye. There were more than 300 delegates from 135 organisations representing research institutes, and various organisations concerned with the development, manufacture, erection and operation of rectifiers. Expected developments in rectifier technique during the period 1959-65 were considered. The need for suitable rectifiers for many branches of industry was noted, but the present state of affairs was not considered satisfactory. New types of rectifiers including high-quality semiconductor materials are being introduced very slowly. In recent years research laboratories and factories have nevertheless achieved appreciable successes. A series of pumpless rectifiers is manufactured. Special types of rectifier equipment have been developed for different applications. Germanium rectifiers have been developed for currents from 10 to 200 A and voltages from 100 to 200 V. The ionic excitation system of the

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A Scientific-technical Conference on Rectifiers

hydro-alternators at the Volga Power Station is working satisfactorily. Construction has commenced on the first full-scale 800 kV d.c. transmission line from the Stalingrad power station to the Donbas. Sixty reports and communications were read. Serious defects were revealed in the organisation of production and in the development of new types of rectifier. The developments necessary in the period 1959-65 were reviewed and it was recommended that individual factories should specialise. The main directions of technical development in rectifiers were pointed out.
There are no figures, no references.

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S/110/60/000/010/014/014
E073/E535

AUTHORS: Dolin, N.I. and Zyabkina, Z.F., Engineers

TITLE: Conference on Transformer Construction

PERIODICAL: Vestnik elektropromyshlennosti, 1960, No.10, pp.77-78

TEXT: The conference was held in Zaporozh'ye from April 5-9, 1960. There were over 300 participants. 38 papers and 23 communications were presented. The representative of Gosplan,USSR, P. P. Chusov presented a paper on the tasks and prospects of development in the field of transformer design during 1960-1965, a period during which the production of transformers is to increase by a factor of 3.3. I. S. Kalinichenko, Elektrotechnicheskiy nauchno-issledovatel'skiy institut (Electrotechnical Scientific Research Institute), Zaporozh'ye presented a paper on the present state and prospects of development in the field of large power transformers and auto-transformers. Representatives of other works presented papers on new series and on trends of development in the transformer field. Doctor of Technical Sciences G. N. Petrov discussed the prospects of introducing multi-winding auto-transformers to satisfy the increasing requirements of inter-connected networks with differing voltages. K.K. Chernev, Glavnyy

Card 1/3

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Conference on Transformer Construction

energeticheskiy upravleniya (Chief Power Directorate), Gosplan,USSR, presented a paper in which failures of transformers produced in 1950 were analysed. I. D. Yanshina (MTZ) and B. A. Alekseyev (VNIIE) dealt with methods of investigating and monitoring the humidity of insulation. V. S. Panasyuk (MTZ) dealt with methods of drying transformers. B. V. Vanin and N. B. Leonidova (VNIIE) analysed data on the humidity of transformers in operation and on investigation of processes of drying transformer insulation. V. V. Girshberg (VNIIEM) dealt with the present state and the trends of development in manufacturing complete transformer sub-stations. The problem of using aluminium in transformers was dealt with by M. A. Bass (ZTZ). A. N. Kalyakina (VEI) presented a paper on new insulation materials for transformers. Results of testing and investigation of the dynamic strength of aluminium windings of transformers with textured steel cores were presented by I. S. Nayashkov, L. V. Zamyatina and A. V. Sapozhnikov presented results of investigations of internal protection of transformers and auto-transformers from atmospheric over-voltages.

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Conference on Transformer Construction

Yu. A. Vasil'chenko (ZTZ) reported on methods of improving the cooling of transformers. V. I. Nepomnyashchiy, Komitet standartov, mer i izmeritel'nykh priborov Sovet Ministrov SSSR (Committee of Standards, Gauges and Metering Instruments, Council of Ministers, USSR) presented a paper on the tasks and advantages of standardization in transformer construction.

Card 3/3

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DOLIN. P. A.

Collection of rules in force regarding safety methods. Moskva, Gos. energ. izd-vo, 1951.

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DOLIN, P. A.

The repair of transformers in municipal electrical systems. Moskva, Izd-vo Ministerstva Kommunal'nogo khoziaistva RSFSR, 1951. 166 p. (51-34472)

TK2551.D56

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Pravila bezopasnosti na liniiakh elektroperedachi bez snimatiia napriazheniia (s poiasneniiami) (Safety rules on electric transmission lines without cutting off the current (with explanations)). M˘skva, Gosenergoizdat, 1954. 63 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 6, Sep. 1954

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DOLIN, P.A.

Pravila bezopasnosti pri rabotakh na liniiakh elektroperedachi bez snia:tiia napria:theniia (s poiasneniiami); posobie dlia personala setevykh raionov (Safety rules for work on electric power lines without interrupting the current (with explanations); manual for power line network personnel). Moskva, Gosenergoizdat, 1955. 63 p.

SO: Monthly List of Russian Accessions, Vol 7, No 9, Dec 1954

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DOLIN, P.A.; KHAVIN, M.Z.; SHUTOV, I.G.; SKVORTSOV, I.M., tekhnicheskiy redaktor.

[Collection of safety engineering rules now in force] Sbornik deistvuiushchikh pravil po tekhnike bezopasnosti. Izd. 2-3 peresm. i dop. Sostavili P.A. Dolin, M.Z. Khavin, I.G. Shutov. Moskva, Gos. energ. izd-vo 1955. 696 p. (MLRA 8:8)

1. Russia (1923- U.S.S.R.) Ministerstvo elektrostantsii.
(Safety engineering)

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DOLIN, PETR ALEKSEYEVICH

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Spravochnik po tekhnike bezopasnosti Reference book on accident prevention techniques Moskva, Gosenergoizdat, 1958.

303 l p. illus., diagrs., tables.
Bibliography: p. 302- 304

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BEN'YAMINSON, V.Ye., inzh.; DOLIN, P.A., kand. tekhn. nauk; LYASHENKO, V.D., inzh.

New high-power laboratory for testing high-voltage apparatus. Elek. sta. 29 no.2:67-70 F '58. (MIRA 11:3)
(Electric laboratories)

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DOLIN, P.A., kand. tekhn. nauk.

Effect of the height of the line on ice load. Elek. sta. 29 no.4: 52-54 Ap '58. (MIRA 11:8)
(Electric lines--Overhead)

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DOLIN, P.A., kand.tekhn.nauk

Performance of a split phase of a 400 kv. line under icing conditions. Elek.sta. 29 no.8:63-66 Ag '58. (MIRA 11:11)
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DOLIN, Petr Alekseyevich; SOLOV'YEV, Petr Fedorovich, inzh.; SMIRNOV, A.D., inzh., obshchiy red.; BRANDEBURGSKAYA, E.Ya., red.; LARIONOV, G.Ye., tekhn.red.

[Safety engineering] Tekhnika bezopasnosti. Izd.3., perer. i dop. Moskva, Gos.energ.izd-vo.(Spravochnik elektromontera, no.5) (MIRA 13:4)

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NAYFEL'D, Mark Romanovich; DOLIN, P.A., kand.tekhn.nauk, retsenzent; USTINOVA, Yu.P., red.; LARIONOV, G.Ye., tekhn.red.

[Protective grounding of electric systems] Zashchitnye zazemleniia v elektrotekhnicheskikh ustanovkakh. Izd.2., perer. (MIRA 13:5)
Moskva, Gos.energ.izd-vo, 1959. 214 p.
(Electric currents--Grounding)
(Electric power distribution)

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TUMANOV, Boris Vladimirovich; DOLIN, P.A., red.; VORONIN, K.F., tekhn.red.

[Safety information for electric welders] Pamiatka po tekhnike bezopasnosti dlia elektrosvarshchikov. Moskva, Gos.energ.izd-vo, 1960. 19 p. (MIRA 14:6)
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DOLIN, Petr Alekseyevich; BRANDENBURGSKAYA, E.Ya., red.; BORUNOV, N.I., tekhn. red.

[Manual on safety engineering] Spravochnik po tekhnike bezopasnosti. Izd. 2., perer. Moskva, Gos. energ. izd-vo, 1960. 367 p. (MIRA 14:6)

(Industrial safety)

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DOLIN, P.A.; KHAVIN, N.Z.; SHUTOV, I.G.; VORONIN, K.P., tekhn. red.

[Collection of safety engineering regulations] Sbornik deistvuiushchikh pravil po tekhnike bezopasnosti. Izd.3., peresm. i dop. Moskva, Gos.energ.izd-vo. Vol.1. 1961. 751 p. (MIRA 14:12)
(Electric power plants—Safety measures)
(Electric power distribution—Safety measures)

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DOLIN, P.A.; KHAVIN, N.Z.; SHUTOV, I.G.; VORONIN, K.P., tekhn.red.

[Collection of regulations in industrial hygiene] Sbornik deistvuiushchikh pravil po tekhnike bezopasnosti. Izd.3., peresm. i dop. Moskva, Gos.energ.izd-vo. Vol.2. 1962. 480 p. (MIRA 15:5)

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DOLIN, Petr Alekseyevich; MIRONOV, P.M., red.; ORLOVA, V.Ya., red. izd-va; SHKLOVSKAYA, I.Yu., red.izd-va; ISLENT'YEVA, P.G., tekhn. red.

[Technical norms; a handbook] Tekhnicheskie normativy; spravochnik. Pod red. P.M.Mironova. Moskva, Metallurgizdat, 1963. (MIRA 16:7)

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DOLIN, P.A.; BARG, I.G., inzh., red.; BUL'DYAYEV, N.A., tekhn. red.

[Work on operating overhead electric power transmission lines; clarifications for chapter IV of "Safety Engineering Regulations for Operating Overhead Power Transmission Lines with Voltages in Excess of 1,000 volts."]Raboty pod napriazheniem na vozdushnykh liniiakh elektroperedachi; poiasneniia k glave IV "Pravil tekhniki bezopasnosti pri ekspluatatsii vozdushnykh linii elektroperedachi napriazheniem vyshe 1 000 v." Izd.2., perer. Moskva, Gosenergoizdat, 1962. 109 p. (MIRA 15:9)

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(Electric power distribution--Safety regulations)

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SEMENOV, N.N.; FRUMKIN, A.N.; DOLIN, P.I.

Natal'ia Alekseevna Bakh, 1895-; on her seventieth birthday and forty-fifth anniversary of scientific activity. Zhur. fiz. khim. 39 no.6:1538-1539 Je '65. (MIRA 18:11)

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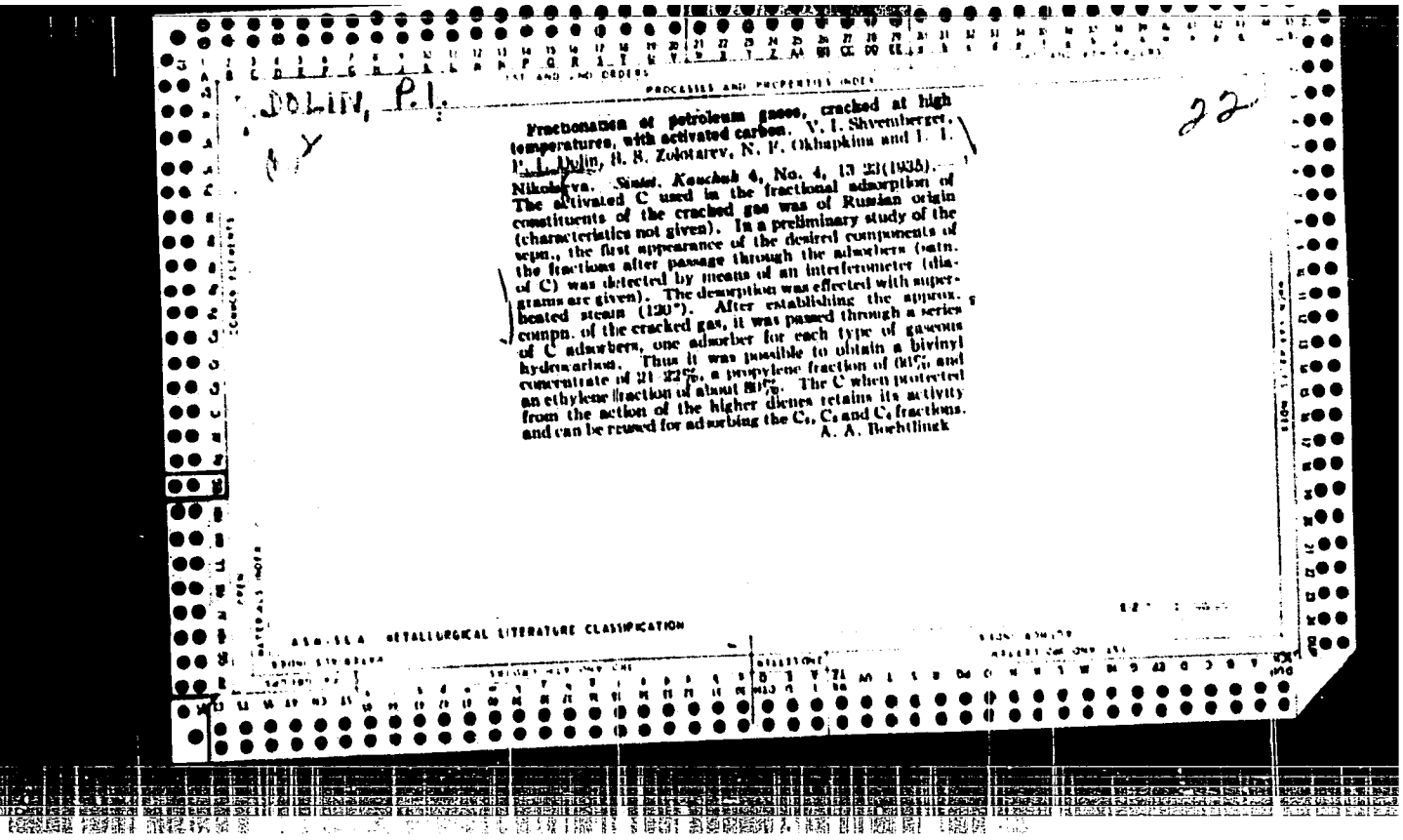

JOLIN, P.I.

22

PROCESSES AND PROPERTIES INDEX

Fractionation of petroleum gases, cracked at high temperatures, with activated carbon. V. I. Shvenberger, P. I. Jolin, S. S. Zolotarev, N. F. Okhapkina and I. I. Nikolaeva. Sintet. Kauchuk 4, No. 4, 13-23(1935). The activated C used in the fractional adsorption of constituents of the cracked gas was of Russian origin (characteristics not given). In a preliminary study of the vapn., the first appearance of the desired components of the fractions after passage through the adsorbers (satn. of C) was detected by means of an interferometer (diagrams are given). The desorption was effected with superheated steam (120°). After establishing the approx. compn. of the cracked gas, it was passed through a series of C adsorbers, one adsorber for each type of gaseous hydrocarbons. Thus it was possible to obtain a divinyl concentrate of 21-22%, a propylene fraction of 61%, and an ethylene fraction of about 80%. The C when protected from the action of the higher dienes retains its activity and can be reused for adsorbing the C_4, C_3 and C_2 fractions.
A. A. Boehtlingk

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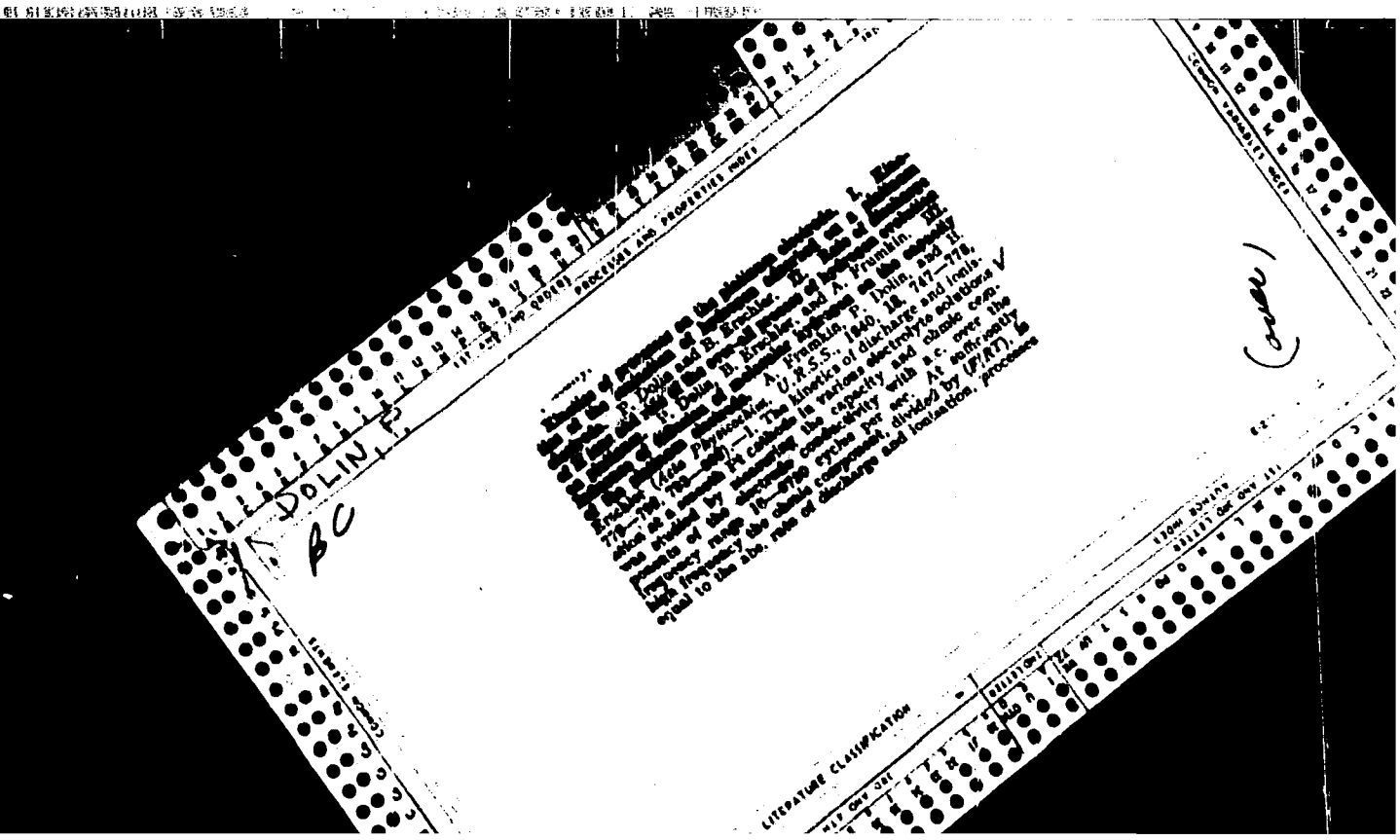

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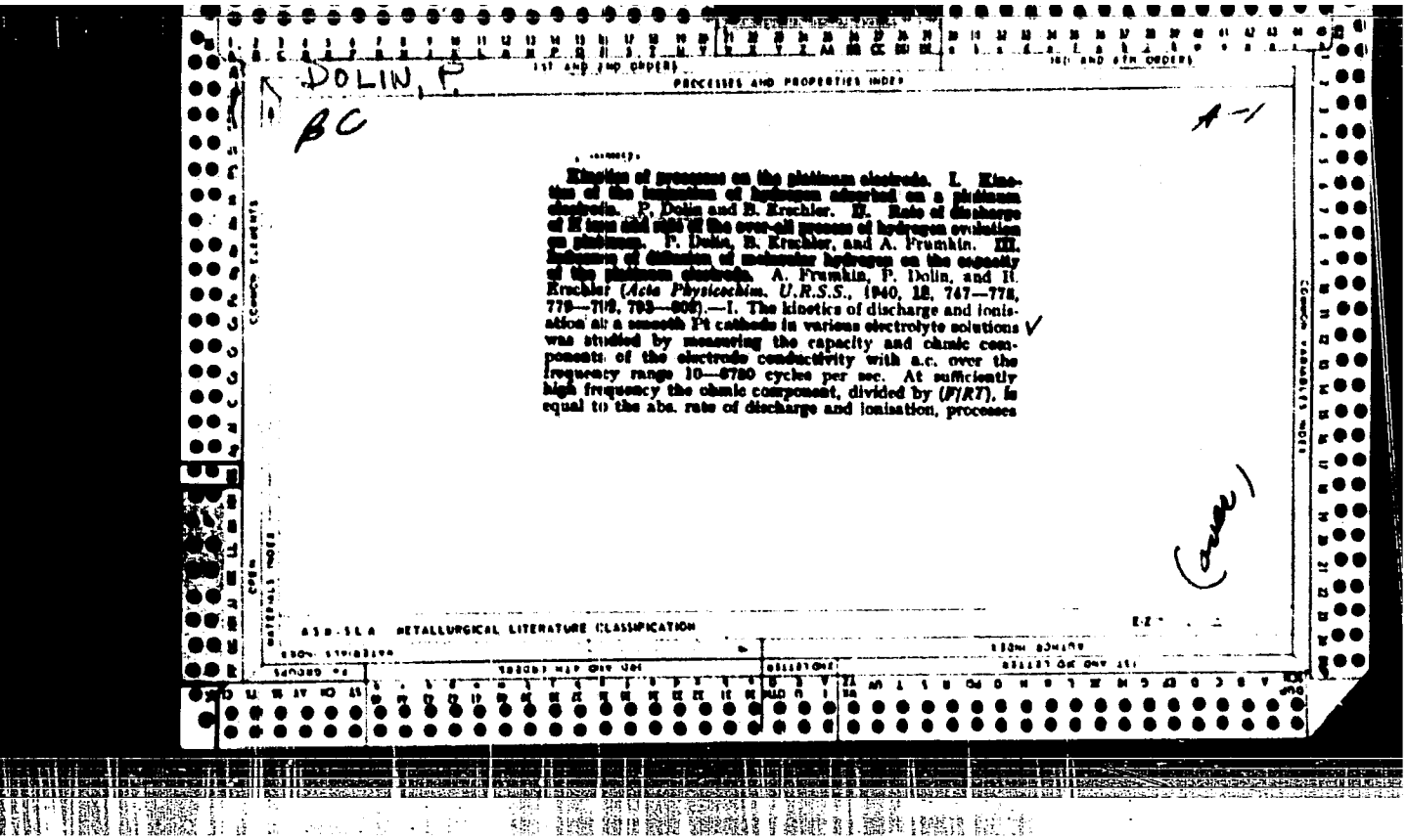

DOLIN, P.

BC

PROCESSES AND PROPERTIES INDEX

Kinetics of processes on the platinum electrode. I. Kinetics of the ionisation of hydrogen adsorbed on a platinum electrode. P. Dolin and B. Ershler. II. Rate of discharge of H ions and rate of the over-all process of hydrogen evolution on platinum. P. Dolin, B. Ershler, and A. Frumkin. III. Influence of diffusion of molecular hydrogen on the capacity of the platinum electrode. A. Frumkin, P. Dolin, and B. Ershler (*Acta Physicochim. U.R.S.S.*, 1940, 12, 747—778, 779—782, 783—806).—I. The kinetics of discharge and ionisation at a smooth Pt cathode in various electrolyte solutions was studied by measuring the capacity and ohmic components of the electrode conductivity with a.c. over the frequency range 10—6780 cycles per sec. At sufficiently high frequency the ohmic component, divided by (F/RT), is equal to the abs. rate of discharge and ionisation, processes

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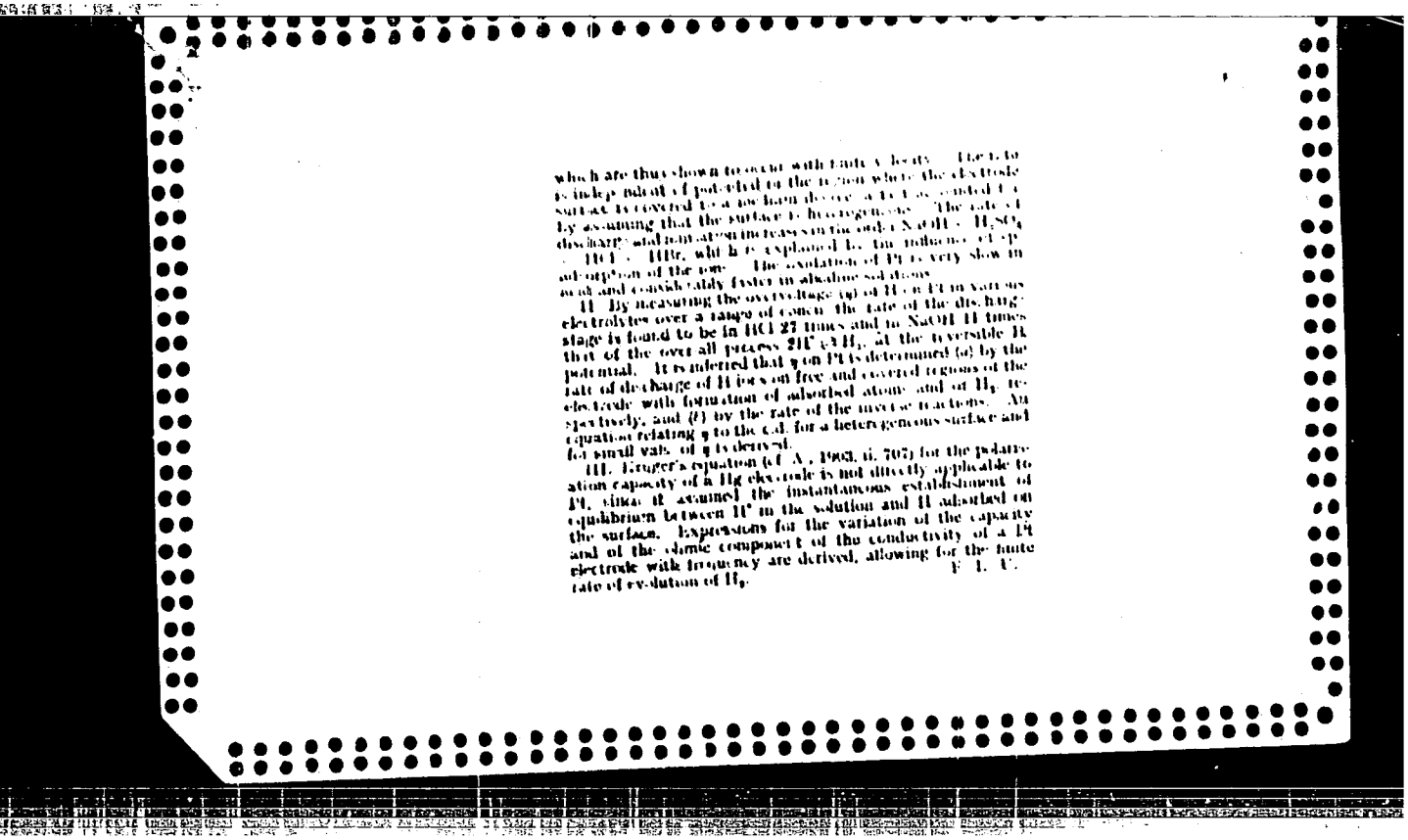

which are thus shown to react with [illegible] Hg to [illegible] is independent of potential in the region where the electrode surface is covered by an [illegible] layer. The rate of discharge and [illegible] by assuming that the surface is heterogeneous. The rate of adsorption of the ions. The evolution of H_2 is very slow in acid and considerably faster in alkaline solutions.

II. By measuring the overvoltage (η) of H on Pt in various electrolytes over a range of current the rate of the discharge stage is found to be in HCl 27 times and in NaOH 11 times that of the over all process $2H^+ + 2\epsilon \rightarrow H_2$, at the reversible H potential. It is inferred that η on Pt is determined (a) by the rate of discharge of H ions on free and covered regions of the electrode with formation of adsorbed atoms and of H_2 respectively, and (b) by the rate of the inverse reactions. An equation relating η to the c.d. for a heterogeneous surface and for small vals. of η is derived.

III. Drucer's equation (cf. A., 1903, ii, 707) for the polarisation capacity of a Hg electrode is not directly applicable to Pt, since it assumed the instantaneous establishment of equilibrium between H^+ in the solution and H adsorbed on the surface. Expressions for the variation of the capacity and of the ohmic component of the conductivity of a Pt electrode with frequency are derived, allowing for the finite rate of evolution of H_2. P. L. W.

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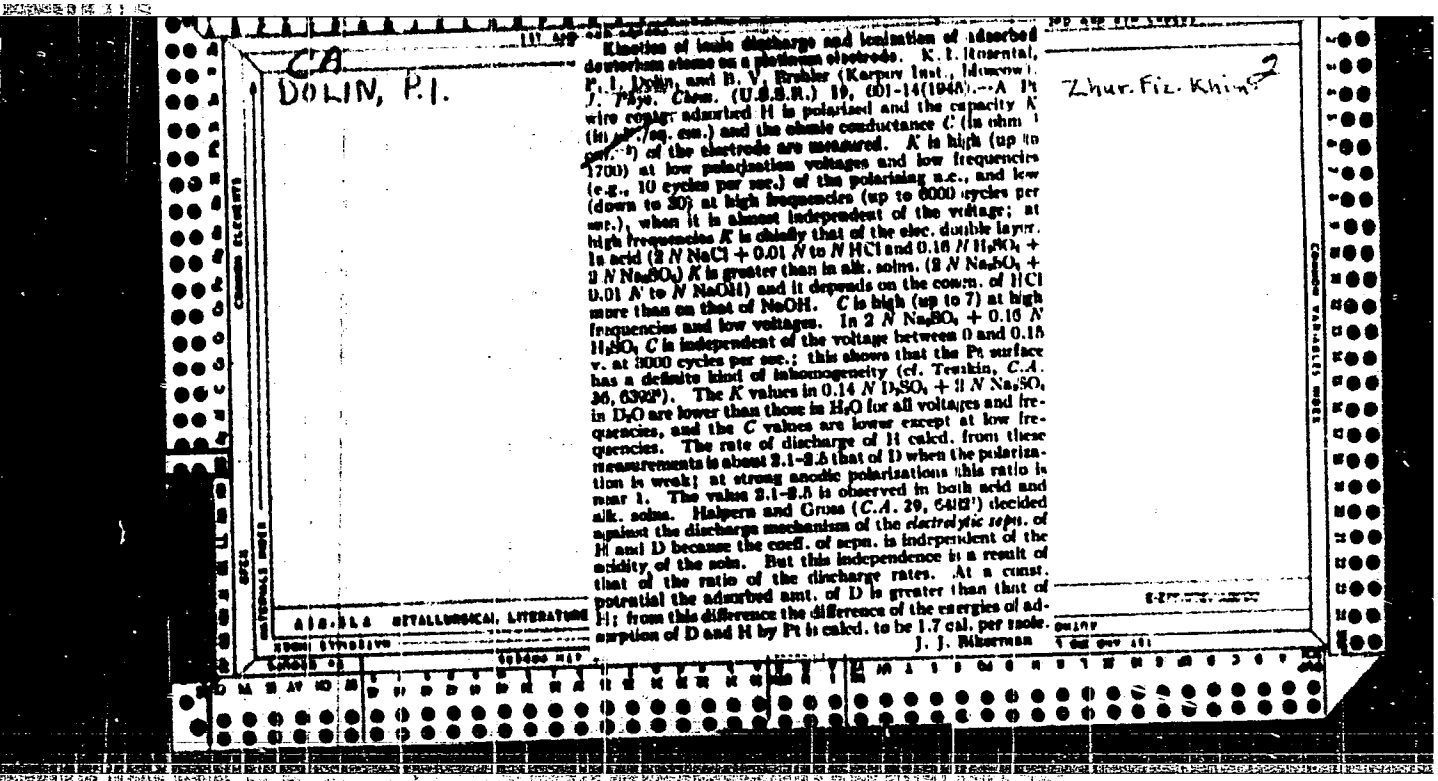

CA

DOLIN, P.I.

Zhur. Fiz. Khim. 2

Kinetics of ionic discharge and ionization of adsorbed deuterium atoms on a platinum electrode. K. I. Rozental, P. I. Dolin, and B. V. Ershler (Karpov Inst., Moscow). *J. Phys. Chem.* (U.S.S.R.) 19, 601-14(1945).—A Pt wire coated adsorbed H is polarized and the capacity *K* (in μf./sq. cm.) and the ohmic conductance *C* (in ohm^{-1} cm.$^{-2}$) of the electrode are measured. *K* is high (up to 1700) at low polarization voltages and low frequencies (e.g., 10 cycles per sec.) of the polarizing a.c., and low (down to 20) at high frequencies (up to 6000 cycles per sec.), when it is almost independent of the voltage; at high frequencies *K* is chiefly that of the elec. double layer. In acid (2 *N* NaCl + 0.01 *N* to *N* HCl and 0.16 *N* H_2SO_4 + 2 *N* Na_2SO_4) *K* is greater than in alk. solns. (2 *N* Na_2SO_4 + 0.01 *N* to *N* NaOH) and it depends on the concn. of HCl more than on that of NaOH. *C* is high (up to 7) at high frequencies and low voltages. In 2 *N* Na_2SO_4 + 0.16 *N* H_2SO_4 *C* is independent of the voltage between 0 and 0.15 v. at 3000 cycles per sec.; this shows that the Pt surface has a definite kind of inhomogeneity (cf. Temkin, *C.A.* 36, 6392^9). The *K* values in 0.14 *N* D_2SO_4 + 2 *N* Na_2SO_4 in D_2O are lower than those in H_2O for all voltages and frequencies, and the *C* values are lower except at low frequencies. The rate of discharge of H calcd. from these measurements is about 2.1–2.5 that of D when the polarization is weak; at strong anodic polarizations this ratio is near 1. The value 2.1–2.5 is observed in both acid and alk. solns. Halpern and Gross (*C.A.* 29, 5418^3) decided against the discharge mechanism of the *electrolytic sepn.* of H and D because the coeff. of sepn. is independent of the acidity of the soln. But this independence is a result of that of the ratio of the discharge rates. At a const. potential the adsorbed amt. of D is greater than that of H; from this difference the difference of the energies of adsorption of D and H by Pt is calcd. to be 1.7 cal. per mole.

J. J. Bikerman

ASM-SLA METALLURGICAL LITERATURE

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DOLIN, P. I.

Kinetics of deuterium ions discharge and ionization of adsorbed deuterium atoms on a platium electrode. A. Rozental, P. Dolin, and B. Ershler (Acta Physicochim. USSR, 1946, 21, 213-234; A., 1941, I, 338).
The capacity and ohmic components of the a.c. conductivity of a Pt. electrode in acid nd alkaline solutions of 2N Na_2SO_4 in H_2O and D_2O have been investigated between 10 and 6000 cycles and over a range of overpotential from 0 to 1v. Charging curves of Pt were obtained in the same solutions. At potentials close to those of the corresponding gas electrodes acid solutions, and 1:2.1-2.5 in alkaline solutions. The difference in the discharge rates may be due to a greater adsorption of D that of H on Pt. The difference between the energies of adsorption of D and H on Pt is calc. from the charging curves to be 1.7 kg. -cal. This indicates that the diffe ence in activation energies for discharge of D and H is not great. The capacity and ohmic compinents of the conductivity of a Pt electrode were investigated in aq. 2N NaCl in the presence of 0-01-1n-HCL of NaOh. Results agree with th Volmer-Frumkin theory of slow discharge. The variation in the rate of discharge of H and D with potential indicates that the surface of Pt is of a more complex inhomogeneity that was inferred on the basis of charging curves alone (cf. loc. cit.). O.D.S.

Sci. Res. Physico-Chemical Inst. im L. Ya. Karpov

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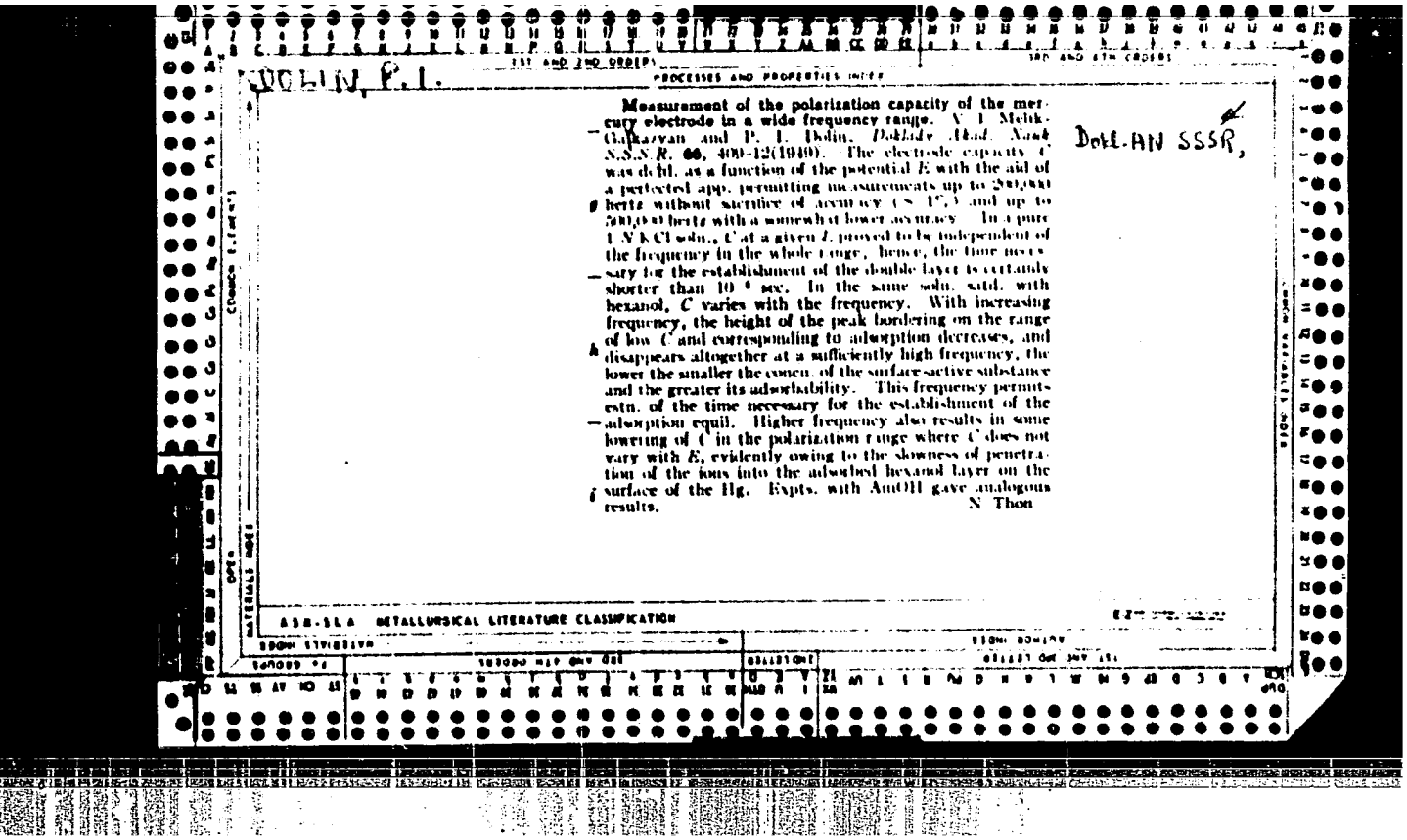

DOLIN, P. I.

PROCESSES AND PROPERTIES INDEX

Measurement of the polarization capacity of the mercury electrode in a wide frequency range. V. I. Melik-Gaikazyan and P. I. Dolin. *Doklady Akad. Nauk S.S.S.R.* **66**, 489-92(1949). The electrode capacity C was detd. as a function of the potential E with the aid of a perfected app. permitting measurements up to 500,000 hertz without sacrifice of accuracy ($\sim 1\%$) and up to 500,000 hertz with a somewhat lower accuracy. In a pure 1 *N* KCl soln., C at a given E proved to be independent of the frequency in the whole range, hence, the time necessary for the establishment of the double layer is certainly shorter than 10^{-6} sec. In the same soln. satd. with hexanol, C varies with the frequency. With increasing frequency, the height of the peak bordering on the range of low C and corresponding to adsorption decreases, and disappears altogether at a sufficiently high frequency, the lower the smaller the concn. of the surface-active substance and the greater its adsorbability. This frequency permits estn. of the time necessary for the establishment of the adsorption equil. Higher frequency also results in some lowering of C in the polarization range where C does not vary with E, evidently owing to the slowness of penetration of the ions into the adsorbed hexanol layer on the surface of the Hg. Expts. with AmOH gave analogous results.

N. Thon

Dokl. AN SSSR,

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DOLIN, P.I.; LOSEV, V.V.; LUKOVTSEV, P.D.; MEDVEDOVSKIY, P.D.

Letter to the editor. Usp. khim.,22 no.6:775-776 Je '53. (MLRA 6:5)
(Electrochemistry--History)

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DOLIN

BAKH, N.A., professor, doktor khimicheskikh nauk, redaktor; VEKSHCHINSKIY, I.V., redaktor; DOLIN, P.I., redaktor; MYASNIKOV, I.A., redaktor; KISELEVA, A.A., tekhnicheskiy redaktor.

[Collection of papers on radiation chemistry] Sbornik rabot po radiatsionnoi khimii. Moskva, 1955. 262 p. (MLRA 8:11)

1. Akademiya nauk SSSR.
(Radiation)

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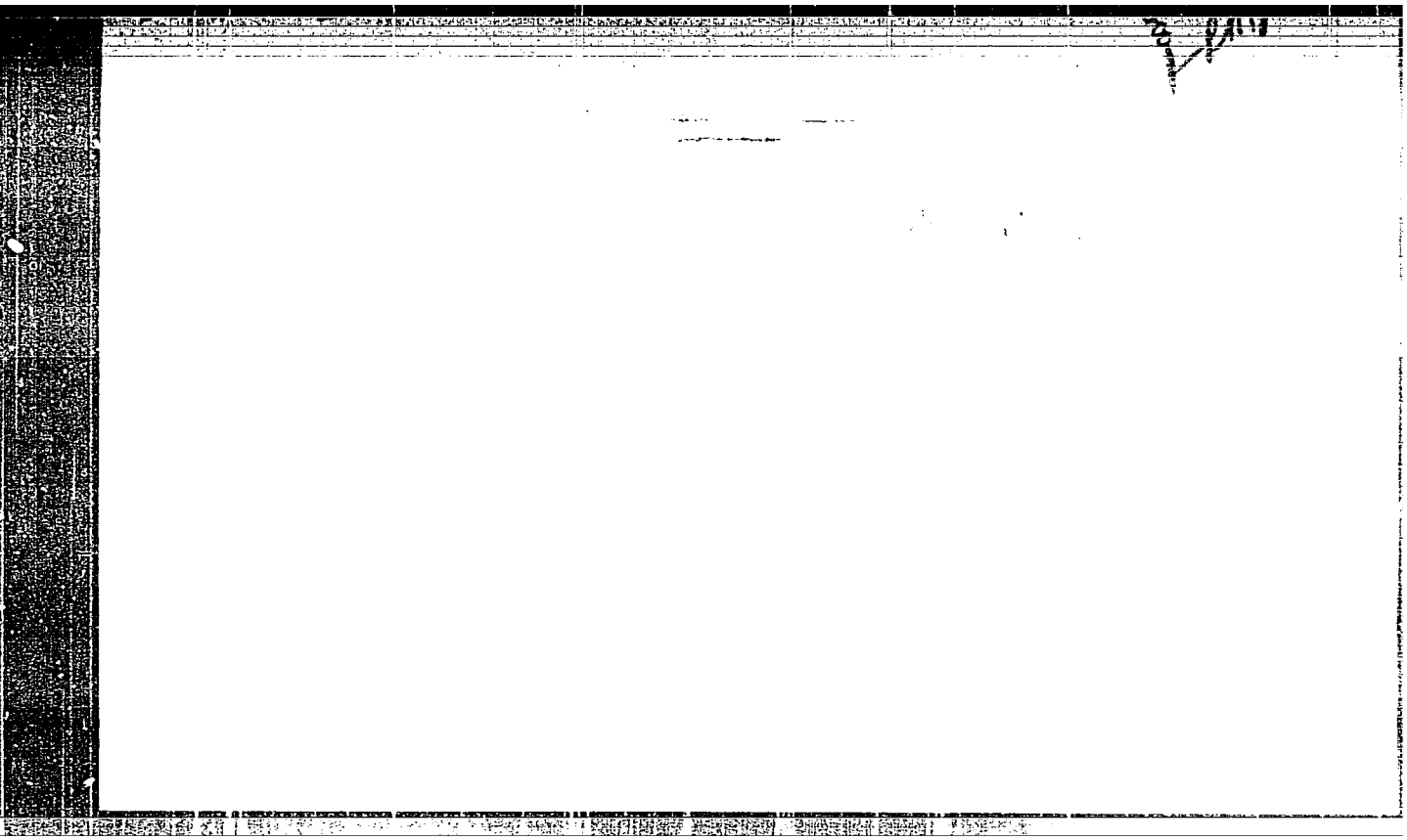

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Dolin, P. I.

V

Influence of dissolved oxygen on the radiolysis of water by the action [illegible]. P. I. Dolin, *Sbornik Rabot Radiatsionnoi Khim., Akad. Nauk* [illegible]. 1955, 7-23.—Doubly distd. water was exposed to x-radiation from a Röntgen tube having a cylindrical W anode, 30 mm. in diam., at 65 kv., and 200 ma., anode current, or to γ-radiation from a Co^{60} source. For dosages of 0–1.5 × 10^{20} e.v./ml., H (formed by the reaction $2H_2O \rightarrow H_2 + H_2O_2$) varies linearly with dosage in O-satd. water, if the gaseous reaction products are removed. If the gaseous products are permitted to build up pressure, a steady state is reached beyond which further changes in the pressure of the H, P_{H_2}, and the concn. of H_2O_2, $C_{H_2O_2}$, are negligible. In O-satd. H_2O, this P_{H_2} is 226 mm. Hg, and $C_{H_2O_2} = 0.93 \times 10^{-3}N$. These pressures and concns. are reduced when pressure of the O in the system is reduced. The presence of H_2SO_4 at concns. of 0.1 to 1 *N* increases radiolysis in conformity with the kinetic mechanism based on the ionic dissocn. of the free radicals HO_2 and OH. KOH increases radiolysis at concns. as low as $10^{-3}N$.

C. H. Fuchsman

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Chem

Rad

Phy. Lab

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DOLIN, P. I.

Kinetics of the reaction of hydrogen peroxide with hydrogen in aqueous solution under the influence of x-rays. P. I. Dolin. *Sbornik Rabot Radiatsionnoi Khim., Akad. Nauk S.S.S.R.* 1955, 21-35.--Studies of the kinetics of radiation-induced decompn. of H_2O_2 by H_2 indicate the existence of 4 H_2O_2 concn. ranges characterized by different functional relations of decompn. rate with concn. The concn. ranges for regions I-IV, resp., are: 0.00005-0.0005, 0.0005-0.002, 0.002-0.01, 0.01-1.15 moles/l. The regions are characterized by the following resp. values for $-d[H_2O_2]/d(IJ)$ where J is the dosage power: region I, $-K_1 + (K_1/[H_2O_2])$, where K_1 is 0.33×10^{-4} mols./e.v., $K_2 = 1.3 \times 10^{10}$ (mols.)^2/e.v.; region II, 4.20 mols./(100 e.v.); region III, $K_1 + K_1'[H_2O_2]$, where K_1' is 1.5 mols./e.v., $K_2 = 1.8 \times 10^{5}$ mols./(100 e.v.) (moles); region IV, $K_1 + K_1'[H_2O_2]^{1/2}$ where K_1 is 47 mols./e.v. and K_2 is 66 mols./(100 e.v.) (moles)$^{1/2}$.

C. H. Fuchsman

Chem Phys

PM Sect

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DOLIN, P.I.

USSR/Scientists - Chemistry

Card 1/1 Pub. 147 - 1/21

Authors : Rebinder, P. A.; Dolin, P. I.; Kabanov, B. N.

Title : The work of A. N. Frumkin and his school in the field of surface phenomena and kinetics of electron processes

Periodical : Zhur. fiz. khim. 29/10, 1746-1750, Oct 1955

Abstract : Honoring the 60-th birthday of the famous Soviet physico-chemist, Academician Aleksandr Naumovich Frumkin, a group of his colleagues published a list of Frumkin's scientific research work on surface phenomena and the kinetics of electrode processes.

Institution : .....

Submitted : .....

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410820010-5

DUZHENKOV, V. I. and DOLIN, P. I.

"The Influence of X-rays on Dilute Water Solutions of Organic Substances" p.96

Trudy Transactions of the First Conference on Radioaction Chemistry, Moscow, Izd-vo AN SSSR, 1958. 330pp.
Conference 25-30 March 1957, Moscow

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"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000410820010-5

BRUSENTSEVA, S. A., DOLIN, P. I.

"The Influence of Potassium Bromide and Potassium Chloride Concentration on the Yield of Molecular Products From Radiolysis of Water Soltuions" p.40

Trudy Transactions of the First Conference on Radioaction Chemistry, Moscow, Izd-vo AN SSSR, 1958. 330pp.
Conference -25-30 March 1957, Moscow

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BAKH, N.A., prof., otv. red.; MEDVEDEV, S.S., red.; VESELOVSKIY, V.I., prof., red. DOLIN, P.I., doktor khim. nauk, red.; MILLER, M.B., kand. khim. nauk, red. TSIMLIN, B.L., kand. khim. nauk, red.; TRIFONOV, D.N., red. izd-va.; BUGAYENKO, L.T., red. izd-va.; MOSKVICHEVA, N.I., tekhn. red.

[All-Union Conference on Radiation Chemistry; transactions] Trudy I Vsesoiuznogo soveshchaniia po radiatsionnoi khimii.[Moscow, 1957.] Moskva, Izd-vo Akad. nauk SSSR, 1958. 330 p. (MIRA 11:11)

1. Chlen-korrespondent AN SSSR (for Medvedev).
(Radiochemistry)

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DOLIN, P.I

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Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk

Deystviye ioniziruyushchikh izlucheniy na neorganicheskiye i organicheskiye sistemy (Effect of Ionizing Radiation on Inorganic and Organic Systems) Moscow. Izd-vo AN SSSR, 1958. 416 p. 7,000 copies printed.

Resp. Ed.: Pshezhetskiy, S. Ya.; Ed. of Publishing House: Bugayenko, L.T.; Tech. Ed.; Prusakova, T. A.

PURPOSE: This publication is for scientists working in the field of radiochemistry.

COVERAGE: This collection of articles represents contributions of Soviet scientists in the field of radiochemistry. The papers are concerned with the effect of ionizing radiation on organic and inorganic substances in solutions and in the solid phase. These papers were completed in the years 1951 - 1956 at the Institute of Physical Chemistry, AS USSR, the Institute of Physics and Chemistry imeni L. Ya. Karpov, the Moscow State University, and other scientific institutions. Most of these works are a continuation of those published in "Sbornik rabot po radiatsionnoy khimii" published in 1955. Ts. I. Zalkind and Yu. M. Malinskiy cooperated in the editing of this symposium.

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PART 1. REACTIONS IN AQUEOUS SOLUTIONS AND RADIATION AND ELECTRO-CHEMICAL PROCESSES

Preface

Duzhenkov, V.I., Dolin, P.I. Effect of X-ray Irradiation on Aqueous Alkali Solutions Saturated With Oxygen 7

The kinetics of accumulation of molecular products formed in the radiolysis of water are studied in this paper. These products are: hydrogen peroxide and hydrogen. The absorption of oxygen in high-purity alkali solutions saturated with oxygen was also taken into consideration. It was determined that the initial yield of hydrogen depends on the concentration of the irradiated KOH solution only for concentrations up to 0.6 - 0.7 N KOH. The same relation was found for H_2O_2. The material balance of the molecular products showed a strong deviation towards excessive absorption of oxygen. This fact was explained as the formation of higher peroxides, probably HO_2 or the complex $H_2O_2 \cdot HO_2$.

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